

# Aerodromes

FRANCE  
AVIATION CIVILE  
SERVICES

The checklist which will be proposed by the Civil Aviation Authority in the framework of its continuous oversight is intended to help the operator to identify and carry out the necessary actions before restarting or increasing in terms of volume the operation of its aerodrome after a significant reduction in activity. It only addresses safety aspects (no consideration of health and security aspects other than verification of airside access). It has been built using, inter alia, ICAO doc 9981 and a number of existing documents published by ACI, FSF, and EASA as working documents.

In order to approach the restart in the best conditions, this approach of taking into account the risks induced by the period of inactivity will have to be carried out jointly by the aerodrome operator with the civil aviation authorities and the air navigation services.

Since approval of the change is required, it is advisable to keep the Authority regularly informed of the status of the controls and any difficulties that may be encountered. Infrastructure checks and ground aids will be carried out by the operator with the aim of "recertifying" its infrastructure, as the state of the infrastructure is an essential element for recovery.

The actions related to the operating procedures and the operation of the operator's management system listed in this document are essential to actuate the restart. It is therefore advisable, in addition to regular telephone contacts with the Authority, that a meeting be organised by the aerodrome manager with the Authority and the air navigation services shortly before the planned resumption of operations to ensure that all points have been dealt with and that the deadlines envisaged for the resumption are relevant.

The approval of the change shall be effective before publication of the necessary NOTAM and SUP AIP.

## 1. Resumption of commercial operations at an aerodrome

The resumption of commercial air operations at an airfield whose activity has been reduced or suspended for many weeks or months creates a new, 'abnormal' special situation, thus creating increased safety risks that need to be identified. An analysis of specific risks must therefore be carried out by the airfield operator, in conjunction with the Civil Aviation Authorities responsible for the continuous monitoring of the operator and the air navigation services present at the airfield.

Risk mitigation measures will include audits and controls carried out by the operator, possible implementation of new procedures, training, awareness and communication actions towards staff and third parties prior to the resumption of operations, maintenance actions on critical equipment interrupted, capacity limitations at start-up... The actions decided will be adapted to the infrastructure of the airfield, the organization of the operator and the operating conditions associated with the airfield.

In accordance with the provisions of ICAO Annex 14, for any operator receiving international commercial traffic, this assessment of the change related to the resumption of activity must be carried out within the framework of the operator's safety management system, in coordination with the Authority. This assessment of the change shall be approved. Thus, prior to the effective resumption of operations, in order to approve the operator's approach and to have a common vision on the results of the control actions, a meeting between the Authority, the director of the aerodrome, and the air

navigation services present at the airfield should be organised to ensure that all key points have been identified and studied before the resumption..

To facilitate the analysis, the Authority may consider it interesting to offer operators a generic checklist that takes up the main points deserving of attention and controls by domain. It is not intended to be exhaustive, the operator being in the best position to identify a risk of its own (by its infrastructure or organization, its geographical location, its operating conditions...) and it shall be adapted to the situation of the airfield, especially at the level of activity maintained during the crisis.

The list of areas below is based on the list contained in ICAO PANS-Aerodromes Doc 9981.

Attached to the present document, a practical checklist for airport operations resumption is listing points to be checked in accordance with ICAO references.

These documents have been developed by France Aviation Civile Services to support Authorities and Operators in the situation created by Covid 19.

## **INFRASTRUCTURE AND GROUND AIDS**

### **OBSTACLES:**

- Ensure that there are no new obstacles in and around the right-of-way, including checking that obstacle-limitation surfaces are not breached (OLS and OFZ). If this is the case, have them removed (OFZ) or put in place marks and appropriate aeronautical information (OLS) if necessary, after verifying that the air operations are not compromised. The new obstacles could typically be temporary cranes, masts or trees or crops that have become high....
- Ensure that aircraft that remain parked on stands or condemned during the gradual resumption of operations do not breach obstacle-limitation areas, particularly at the critical areas of navigable active runways.
- Make sure that the marking of all obstacles is visible and works at night.

### **PHYSICAL CHARACTERISTICS:**

- Conduct in-depth inspections of the condition of all paved and unpaved surfaces of the movement area, paying particular attention to the cleanliness of these surfaces and the presence of FODs on areas near runways or taxiways (runway strips, open extension, stop extension, runway end safety zone, taxiway strips, radio-altimeter operating area, pre-threshold area).
- Report any sign of significant surface degradation (material damage or plants, ...) and carry out corresponding repairs. If the necessary repairs are postponed, the affected degraded taxiways and areas will be declared unusable (to be specified in the NOTAM). In the case of minor damage, their evolution will have to be monitored and their repair planned.

- For pavements on which aircraft have been parked for a long period of time, check that they are not sunk or over compacted and that there are no degradations due to possible fluid leakage from aircraft. Perform these audits before the operations resume. Any damage will need to be repaired before the pavements can be used. If repairs are postponed, the affected degraded lanes and areas shall be rendered unusable (to be specified in the NOTAM).
- In general, these in-depth inspections will be carried out in the view that the aerodrome infrastructure shall be 're-certified'.
- For unpaved runways or taxiways, as well as their surroundings, and depending on the condition of the vegetation, cut the grass (and evacuate) and make sure the markings are visible again. If necessary, repair the damage that would have been caused by rain or the presence of animals on the airfield, in the absence of traffic ...
- For all aerodromes concerned by the resumption of operations, the protection of wildlife hazards should take into account the risk of presence of new animals and reinforced runway inspections should be put in place during the recovery period.

#### ELECTRIC NETWORKS AND VISUAL AIDS:

- In the event of a complete shutdown, check the proper functioning of electrical networks supplying the technical and commercial installations and lighting. These checks will apply to inverters, regulators, automates, and for equipment using batteries, their level of charge, and check in coordination with the air navigation services the proper functioning of the radio and nav aids.
- Verify also the proper functioning of electrical backup (check that the switching time meets the requirements), as well as that of the stop bars if they exist (LVP).

#### Check:

- the condition of markings, lights, signs and beacons,
- the functioning of the lighting (continuity of the mark-up and dedicated circuit)
- the functioning of stop bars in case of LVP
- the state and functioning of the PAPI (bulbs, intact boxes, no bird's nest..)

These checks will be more or less conducted in-depth depending from aerodrome use and maintenance carried out during the period when the aerodrome's operations have been reduced or suspended.

#### FACILITIES:

- Check the state of fences, sewerage systems and the presence and condition of wind direction indicators.

#### NOTAM:

- Issue a NOTAM to specify the operating constraints related to the restart.

### **SERVICES PROVIDED BY THE OPERATOR**

#### **RFFS (Rescue and Fire Fighting Services):**

- Fix the level of RFFS protection based on the traffic expected during the resumption and verify that the conditions related to this level are met. If the level of protection changes thereafter, the corresponding checks will be carried out again. Similarly, check that the protective clothing and respiratory equipment provided, the corresponding fire extinguishers, equipment and RFFS vehicles are in well working order.
- Ensure that the pathways used by RFFS vehicles during interventions are well clear of any vehicle or object and allow compliance with the regulatory provisions for response time.
- Test the communication and alert service between the fire station, the control tower and the vehicles to make sure it works.

#### **SPPA (Protection of Wildlife Hazard):**

- For all airports affected by the resumption of operations, take into account the risk of 'additional animals' by the SPPA and implement reinforced runways inspections during the resumption period.
- Proceed with an assessment of wildlife developments on the airfield following the suspension or reduction of activity, and to define appropriate scare actions, in anticipation and resumption of exploitation, the possible presence of additional animals on the ground during the inactivity phase being real. As such, check the condition of the fences more often and the analysis of the vicinity of the airfield.

### **OPERATING PROCEDURES**

Some existing operating procedures will need to be adapted and new procedures created to respond to the new risks identified and thus allow the resumption. This section lists the items considered essential for which an Authority approval will be sought. It is not necessarily intended to be exhaustive.

- Based on the overall result of the analysis carried out and for the necessary information to be communicated to the users of the airfield, make sure that the NOTAMs published in the AIP are in line with the operational situation of the airfield in real time.
- Put in place a procedure to carry out in-depth infrastructure checks on the areas where the aircraft were stored before the resumption and then on a regular basis (daily?) when planes are gradually released.

- If aircraft were to remain temporarily parked on a runway or taxiway, declare them unusable. Similarly, any degraded area that has not been repaired before the resumption of operation will be unusable.
- If necessary, establish and maintain in real time a new airfield traffic plan incorporating these closures (take into account OLS surfaces, critical areas, roads and RFFS exercises to be defined and the risk of runway or taxiway incursions by vehicles or maintenance personnel in particular). Establish the correct marking, and where possible, turn off the corresponding parts of the lighting. The plan must be developed in coordination with air navigation services and must be published in an AIP SUP.
- Similarly, depending on the areas occupied and the recovery being gradual, establish and update a parking plan to know where to park the planes according to their use (short, medium- and long-term parking). Establish this plan in coordination with the third parties concerned and take into account the risks generated by prolonged parking (additional load on the pavements, insufficient distances between aircraft that can generate potential collisions during future movements, clearance needed around the planes for a RFFS intervention, the surfaces of obstacle limitations OLS - are not pierced. ...). Air navigation services will be kept on a regular basis with updates on the changes.
- Set up a specific procedure for planes exiting their off-station parking area, to avoid any potential wing-to-wing collision, and minimize the effects of the blast that could be generated.
- Ensure that the facilities and equipment associated with the refueling are in good working order and that the specifications of the fuel provided are correct.
- Plan maintenance and verification operations in relation to critical equipment (power supply, PAPI, ... ) which would have been postponed, and carry them out before the resumption of operation if it was discontinued..
- Check the proper operation of vehicles using batteries and allowed to circulate on the maneuvering area as well as radios.
- Strengthen the first runway and traffic area inspections after restart of operations
- Check with the ground handlers to ensure that their equipment works properly
- For the removal of accidentally immobilized aircraft, check that the equipment and procedures in place are working and are compatible in particular with the new traffic plan put in place if there is any.
- For low-visibility operations, check that the coordination conditions with air navigation services are always met

In general, anticipate an increased internal/external communication with all stakeholders for the definition of these new procedures and to set up a daily feedback to correct reported troubles on some aspects if necessary.

## ORGANISATION AND SMS OF THE OPERATOR

The operator will have to incorporate the following elements into its analysis:

### In terms of personnel:

- Take into account the recent lack of activity resulting in a deterioration of skills and knowledge of procedures by staff (less rigorous follow-up of procedures).
- Provide training for new developments and raise awareness of new risks.
- Also consider the increased workload on staff present at the resumption of operations.
- Ensure that the workforce will be in relation to the planned recovery activity.

### Work resumes and changes in progress interrupted:

- Verify that the assumptions and actions taken during the implementation of these changes are still applicable, if it is not the case, modify them according to the coordination procedures normally established before implementing them. Also check the installation of appropriate markers for work in this new context.

In general, the operator will need to identify all deferred actions and plan their implementation if necessary. These are primarily concerned with the training and maintenance of staff capacity, the possible regulatory compliance actions already identified.

Finally, coordination with third parties should be effective and should also focus first on the new aspects of exploitation.

## 2. Resumption of commercial operations at an aerodrome and the role of the aerodrome operator

Considering the present sanitary crisis called COVID 19, the present document consists in a wild checklist based on ICAO documentation and dedicated to assist airport managers before normal operations resuming. Moreover this document might be useful for any other specific situation triggered by all sorts of crisis (i.e climate / social / etc...) that could force airport managers to stop or strongly reduce their operational running.

Find below a table of the different domains that could be possibly impacted by a reduction or a total lockdown of the airport daily life. This table is based on all subjects included in the certification scope. For each subject a level of priority is proposed. (High or Low)

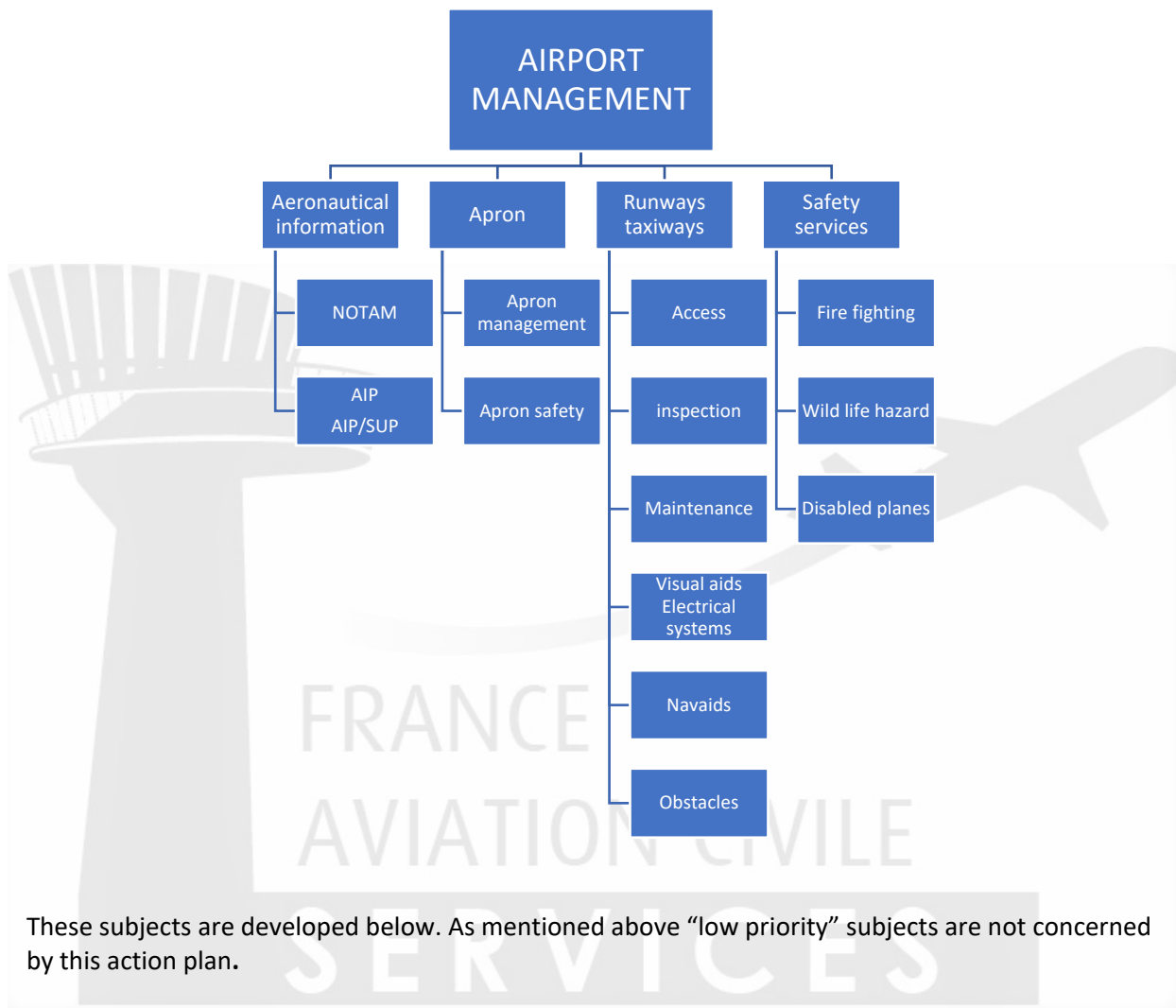
Since the situation requires priorities, we will not consider subjects of “low priority” and only deal with “high priority” subjects.

| Subjects                                                                     | Level of priority |
|------------------------------------------------------------------------------|-------------------|
| – <i>Aeronautical information and aerodrome data</i>                         | High              |
| – <i>Access to the movement area</i>                                         | High              |
| – <i>Aerodrome emergency plan</i>                                            | Low               |
| – <i>Rescue and fire fighting</i>                                            | High              |
| – <i>Inspection of the movement area</i>                                     | High              |
| – <i>Maintenance of the movement area</i>                                    | High              |
| – <i>Snow and ice control, and other hazardous meteorological conditions</i> | Low               |
| – <i>Visual aids and aerodrome electrical systems</i>                        | High              |
| – <i>Safety during aerodrome works</i>                                       | High              |
| – <i>Apron management</i>                                                    | High              |
| – <i>Apron safety</i>                                                        | High              |
| – <i>Vehicles on the movement area</i>                                       | High              |
| – <i>Wildlife hazard management</i>                                          | High              |
| – <i>Obstacles</i>                                                           | High              |
| – <i>Removal of disabled airplane</i>                                        | High              |
| – <i>Low visibility operation</i>                                            | High              |
| – <i>Dangerous goods management</i>                                          | Low               |
| – <i>Navais protection</i>                                                   | High              |

Furthermore it will remain recommended for all staff to respect social distancing as often as possible and for airport operators to provide staff with protecting masks and hydro alcoholic liquid.

## 2.1 Preparation of action plan

- Prepare an action plan as proposed :



These subjects are developed below. As mentioned above “low priority” subjects are not concerned by this action plan.

- Establishment of a procedure to conduct thorough infrastructure checks on areas where aircraft have been stored ;
- Information on runways and taxiways that cannot be used due to parked aircraft;
- Establish a new aerodrome traffic plan related to air navigation services + publication in SUP AIP ;
- Establish a parking plan according to the areas occupied in coordination with the third parties concerned and inform the air navigation services ;

- Establish a planning of all necessary maintenance operations and works before the resumption of activity ;
- For operations in low visibility, check that the conditions for coordination with air navigation services are always met;
- Plan a programme of refresher training (after more or less long periods of interruption) on the existing procedures and on the new procedures put in place as a result of the changes made;
- Provide a training programme to maintain staff skills.

## 2.2 Checklists

### 2.2.1 Infrastructure and ground aids

#### ✓ **Obstacles** (High priority)

(Ref. ICAO Annex 14)

Check if there is possible new obstacles in the runway obstacle free zone. ☐

If any, check markings and lighting of authorized obstacles, and any new unauthorized obstacles particularly temporary in nature (e.g. mobile cranes) which may impact on the safe operation of aircraft. ☐

If any, notify it by publishing a NOTAM ☐

Aircraft parked on the manoeuvre area do not infringe the obstacle limitation surfaces, the critical and sensitive areas of radio navigation aids serving the active runway(s) and the line of sight of air traffic control. Information on such closed parts of the manoeuvre area is made available through a notice to airmen (NOTAM). ☐

#### ✓ **Physical characteristics**

- Inspection of the movement area (High priority)

(Ref. ICAO Annex 14 and Doc. 9137 Part. 8)

Overall and detailed inspection of the runway(s) and surroundings, taxiways and surroundings, unpaved surfaces ☐

- Overall and detailed inspection of the runway(s), stop ways, clearways, taxiways, surroundings and unpaved surfaces in the vicinity ☐
- No water puddle or liquid leakage ☐

- No foreign object debris ☐
- No obstruction for visibility on markings, panels, lightings ☐
- Flashing lights and visual slope indicator OK ☐
- No unauthorized obstacles in the obstacle free zone ☐
- All means to prevent runway incursion in function (flashing lights/markings) ☐

- Maintenance of the movement area (High priority)

(Ref. ICAO Doc. 9157, Doc 9137 Part.2 and Circular 355)

As a consequence of the overall inspection mentioned above, it might be necessary to start rapidly works or specific repairs as needed. (in application of workings procedures and SMS rules).

Refer to following paragraph "Safety during aerodrome works"

- Safety during aerodrome works (High priority)

(Ref. ICAO Doc 9859)

If corrective or planned works are necessary meanwhile the specific MoU must be applied.

In case of no MoU:

- Publish aeronautical information (NOTAM/AIP) ☐
- Manage safety markings and lightings ☐
- Determine safety risks ☐
- Mitigate safety risks ☐
- Comply with SMS system (Doc ICAO 9859) ☐

- ✓ **Electric network and visual aids** (High priority)

(Ref. ICAO Doc 9154 Part.4, Part.5 and Part.6)

- Check normal power supply and test alternative energy supply (inverter/generator) ☐
- Check all manoeuvre area lightings, markings, signs and wind socks ☐
- Check axis taxiway lighting and runway stopbars (if any) ☐
  - If runway lightings remote is conducted by ATC, all tests will be performed accordingly with the specific memorandum of understanding ☐

- ✓ **Facilities**

- Access to the movement area (High priority)

(Ref. ICAO Annex 17 and Doc 8973)

- Check all gates are properly closed and looked after, all perimeter fences are in good conditions and that any access is secured by staff and tools. ☐
- Check all staff own the right access badge dedicated to their working area ☐
- Check that vehicles are properly equipped and maintained ☐

### 2.2.2 Services provided by the Operator

#### ✓ **Rescue and firefighting** (High priority)

(Ref. ICAO Doc 9137 Part.1)

Rescue and firefighting level of protection in accordance with expected traffic ☐

Check:

- Staff equipment and training ☐
- Number of available vehicles ☐
- Quantity of extinguishing agent ☐
- Alarm systems for fire notification checked ☐
- Alternative means of alert checked ☐
- Emergency access roads remain cleared for RFF vehicles from the fire station cleared ☐

#### ✓ **Wildlife hazard management** (High priority)

Possible presence of wildlife, which might have increased in the absence of frequent operations; A low air traffic density may have increased the attractiveness of the airport site.

A complete perimeter fence of adequate height is the prime method of preventing hazardous wildlife, other than birds, from gaining access to the airfield areas. Check fences and gates. ☐

Prevent food sources to be available to animals on the airport. ☐

Vegetation composition (grass) should be kept at a height that is considered unattractive to hazardous birds/wildlife. Perform appropriate grass cutting ☐

Ask wildlife control team to increase number of inspections as necessary and to provide airport safety with proactive and reactive actions. ☐

### 2.2.3 Operating procedures and Other

✓ **Aeronautical information and aerodrome data** (High priority)

(Ref. ICAO Annex 15 and Doc 10066)

AIP general checking ☐

AIP SUP if necessary ☐

NOTAM in activity: still accurate and/or appropriate? ☐

NOTAM to be issued to inform of all changes in airport configuration and airport restriction such as:

☐

- Aircraft start-up
- Taxiing restrictions
- Apron stands availability
- Schedules changes in operations
- Changes in refuelling procedures
- Restrictions on embarking/disembarking passengers
- Possible new working sites on the airport

✓ **Aerodrome emergency plan** (Low priority)

(Ref. ICAO Doc. 9137 Part.7)

✓ **Snow and ice control, and other hazardous meteorological conditions** (Low priority)

(Ref. ICAO Annex 3)

✓ **Apron management** (High priority)

(Ref. ICAO Doc 9157 Part. 2)

- Ask handling companies to check and report staff capability ☐
- Ask handling companies to check and report good functioning of vehicles and tools ☐
- Ask refuelling companies to report about vehicles availability and fuel quality ☐
- Check markings

✓ **Apron safety** (High priority)

(Ref. ICAO Doc 9137 Part.8 and Doc 9157 Part. 2)

- Availability and competency of staff to carry out their tasks and human factor associated risks due to reduced activity levels. ☐

- Facilities and equipment used for aircraft refuelling provide the aircraft with uncontaminated fuel and of the correct specification. ☐
- Provide overall inspection of aprons in terms of markings, pavement integrity. ☐
- Collect FOD and potential obstacles ☐
- Check possible leakages and depressions due to long term parked aircraft ☐
- Check whether aircraft parked on the manoeuvre area do not infringe the obstacle limitation surfaces, the critical and sensitive areas of radio navigation aids serving the active runway(s) and the line of sight of air traffic control ☐

✓ **Vehicles on the movement area** (High priority)

(Ref. ICAO Annex 14)

Availability and competency of staff to carry out their tasks and human factor associated risks due to reduced activity levels. ☐

Check vehicles good functioning ☐

Check radio equipment ☐

✓ **Removal of a disabled aeroplane** (High priority)

(Ref. ICAO Doc 9137 Part.5)

Before resuming operations, check specific procedures about removal of disabled aircraft. ☐

Check availability and capability of the external operator in charge of possible removal. ☐

✓ **Low visibility operations** (Low priority)

(Ref. ICAO Doc 9365)

✓ **Dangerous goods management** (Low priority)

(Ref. ICAO Doc 9365)

✓ **Nav aids protection** (High priority)

(Ref. ICAO Doc.8071)

In accordance with air traffic services specific checks and tests will be performed. ☐